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Comments and suggestions are welcome by e-mail to ruth.nyblod@uspto.gov.

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With the Under Secretary for IP

Nicholas P. Godici
Commissioner for Patents

I am pleased to announce that on December 7, 2001, Commerce Secretary Donald Evans administered the oath of office to James E. Rogan to be the Under Secretary of Commerce for Intellectual Property and Director of the United States Patent and Trademark Office. Mr. Rogan is a former Congressman from California who had served on the House Judiciary Subcommittee on Courts, the Internet and Intellectual Property and was involved in a number of high-tech issues. He also has been a proponent of the USPTO having adequate resources from its collected user fees.

Commerce Secretary Donald Evans administers oath of office to James Rogan as Under Secretary of Commerce and Director of the United States Patent and Trademark Office. Twin daughters Dana and Claire hold the bible for their dad as wife Christine proudly looks on.

As this will be my last "In Touch" column, I'd like to take the opportunity to review the many organizational accomplishments of 2001, such as the fact that the USPTO received the highest number of patent application filings in its history, exceeding 325,000 applications. This represents an 11 percent growth rate from the previous year with current projections showing a similar growth rate for 2002, particularly in the high technology areas.

Accordingly, workload will certainly continue to be a challenge in 2002. One way in which we plan to address this issue is through hiring. Current plans are to hire over 600 patent examiners in 2002. The focus of the hiring initiative will be toward engineers with electrical backgrounds in order to address the rapid growth in that area of application filings. The USPTO will continue to recruit new examiners through the use of job fairs and visits to college cam-

puses as well as targeted advertising in trade journals.

We achieved notable gains in employee and customer satisfaction levels as well as in quality measures. The results of the 2001 employee satisfaction survey showed an eight percent increase in employee satisfaction with their jobs and a 12 percent increase in satisfaction with the USPTO. This year's results continued a trend of increased overall satisfaction that has risen by 23 percent since the results of the 1998 survey.

With respect to patent quality, in fiscal year 2001 the patent technology centers, working in conjunction with the Office of Quality Management and Training, undertook a number of quality enhancement programs. Our internal data shows an increase in quality in the patents area with a notable 34 percent decrease in the number of applications with a significant question related to quality that was raised by the Office of Quality Review. The number of applications in which prosecution was reopened also decreased 14 percent from last year's level. Our external customer satisfaction levels also reflect this improvement in quality. According to customer satisfaction survey results, five of eight of the areas identified as key drivers to overall satisfaction showed increased levels over the results from 2000.

In the trademark area, the total number of applications filed electronically has continued to increase steadily. These e-filings represented 25 percent of the 2001 total filings. Further, 11 percent of the top filers of trademark applications filed all of their applications electronically in 2001. The pendency of trademark applications to first office action also was reduced to 2.7 months this past year, which represents the lowest pendency to first action level in 13 years.

The Trademark Assistance Center (TAC) was re-staffed and its processes reengineered to better respond to the needs of our external customers. These efforts resulted in improved response times with over 60 percent of all calls to the TAC being answered within 20 seconds. These achievements certainly contributed to the results of the annual customer satisfaction survey. This survey showed a five percent increase in the percentage of trademark customers overall satisfaction level with the performance in the trademark area. Customers also reported with a high level of satisfaction with the clarity of the written communications from the trademark area.

In the area of employee satisfaction, the number of trademark employees participating in the work at home program almost doubled this past year to 90 participants. Participation in this

program enables the employees to improve their efficiency and have greater flexibility in balancing work and home responsibilities by reducing the time spent commuting to and from the work place.

One significant challenge in 2001 was the disruption of patent-related mail in late October. The Brentwood mail facility that handles the bulk of mail going to the patent operation was closed. To date, this facility remains closed. Accordingly, we have made arrangements with other mail facilities to handle patent-related mail. In view of the situation at other mail centers, we have had USPTO mailrooms tested for anthrax by a private testing contractor. I am happy to report that of the 88 samples taken all showed no evidence of anthrax at the USPTO. We will continue to monitor the situation and conduct future tests.

I encourage you to visit our Web site at www.uspto.gov, where we have posted the most up-to-date information on this topic. This information includes a review of the available electronic alternatives to mail as well as provisions in the rules for the use of certificate of mailing and Express Mail for correspondence sent to the USPTO in order to ensure compliance with response periods to official office actions.

Looking ahead to 2002, we will continue to provide automation advancements. There will be a new release of the electronic filing system (EFS) that will extend to electronic filing of provisional patent applications. At the end of fiscal year 2001, over 2,000 applications had been filed with EFS. These new releases of EFS will provide greater functionality to the system and thus additional advantages to our customers. For our employees, the first phase of the liquid crystal display (LCD) monitor and high-speed printer deployment to patent examiners has been completed. In this first phase, 944 examiners received this upgraded equipment. The second phase currently has an early spring deployment schedule. These enhancements to examiner equipment facilitate our ability to efficiently conduct core-examining functions such as locating the best prior art for each application.

Fiscal year 2002 promises to be another great year for the USPTO. As I return to my duties as commissioner for patents, I look forward to all that we will accomplish in the coming year.

USPTO Senior Executives Honored With Presidential Rank Awards

by Ruth Nyblod, Office of Public Affairs

On October 15, 2001, President George W. Bush presented the prestigious Presidential Rank Awards to three senior executives at the United States Patent and Trademark Office (USPTO). The event, held at Constitution Hall in Washington, D.C., honored a select group of career Senior Executive Service (SES) members who serve America with distinction and possess a relentless commitment to public service.

Each year, the president confers the rank of Distinguished Executive and Meritorious Executive on a small group of senior executives who have provided exceptional service to the American people over an extended period of time. Distinguished Executive rank is awarded to leaders who achieve extraordinary results. Only one percent of the SES may earn this award. The Meritorious Executive rank is awarded to leaders for sustained accomplishments. Only five percent of SES members may receive the award.

The USPTO's honorees are:

Distinguished Executive

Robert M. Anderson, assistant commissioner for trademark operations, was recognized for:

> *leading the transformation of trademark operations from an office with labor-intensive, paper-based processes to one effectively leveraging 21st century technologies to benefit its customers and employees. His efforts have resulted in a vastly improved process for registering trademarks, thereby enhancing U.S. commerce and the economy by encouraging investment and productivity in the U.S. marketplace.*

Meritorious Executives

Edward "Kaz" Kazenske, deputy commissioner for patent resources and planning, was recognized for:

> *designing a framework for an efficient and effective organization to serve American inventors by taking the lead in providing a platform for electronic commerce at the Patent and Trademark office. This includes electronic filing and processing of all applications, which has enabled customers to use the Internet to request status information, place orders for products and services, and access patent and trademark data.*

Stephen G. Kunin, deputy commissioner for patent examination policy, was recognized for:

> *designing a framework for the development of policy and procedures in support of today's patent system, which has helped ensure incentives for great innovations and a system that forms a foundation for our knowledge-based economy.*

Recent Developments at the World Intellectual Property Organization

by Tod Preston, Office of Legislative and International Affairs

As readers of ***USPTO Today*** know, one of the United States Patent and Trademark Office's (USPTO) chief missions is developing and strengthening protection of intellectual property (IP) rights around

the world. Working with other intellectual property offices and organizations, including the World Intellectual Property Organization (WIPO), USPTO attorneys in the Office of Legislative and International Affairs are committed to securing more effective and cost-efficient protection of U.S. nationals' IP rights abroad.

Founded in 1974 and headquartered in Geneva, Switzerland, the WIPO is one of 16 specialized agencies of the United Nations. Comprised of 177 Members States, it administers 21 IP-related international treaties. Given the continued globalization of national and regional economies and the growing importance of IP protection, the work of WIPO is more important than ever to the IP interests of the United States.

At a convening of the WIPO Meeting of the Assemblies of Members States from September 24 to October 3, 2001, a number of noteworthy developments occurred in the areas of patents, trademarks and copyrights. Most notable were actions taken to modify the time limits for commencement of the national phase under the Patent Cooperation Treaty, protect marks on the Internet, and improve international protection for audio-visual performances. The meeting was attended by several USPTO representatives including Acting Under Secretary and Acting Director Nicholas Godici.

Patents

In the area of patents, an important modification to the Patent Cooperation Treaty (PCT) was approved to simplify the treaty and to alleviate a serious workload problem faced by certain International Searching and Preliminary Examining Authorities, including the USPTO. Adopted in 1970, the PCT has attracted the membership of 115 countries and a steady growth in filings. In fact, in 2000, more than 90,000 international applications were filed under the PCT, an increase of 23 percent from 1999. These growth rates have generated an enormous increase in workload for PCT offices and authorities. In fact, the problem of coping with the growing workload has been described as a "crisis" by the three authorities that produce the bulk of international search and preliminary examination reports: the European Patent Office, the Japanese Patent Office, and the USPTO.

The Patent Cooperation Treaty simplifies and reduces the cost of obtaining international patent protection. By filing one international patent application under the PCT, a patent applicant can simultaneously seek protection for an invention in each of more than 100 countries throughout the world.

Under Article 22(1) of the Patent Cooperation Treaty (PCT), applicants must, in order to ensure that processing of the interna-

tional application is commenced by the designated offices in which the application is to proceed, perform certain acts before the expiration of 20 months from the priority date. The U.S. proposal, which was adopted at WIPO by the PCT Union Assembly, changes that time limit to 30 months from the priority date, the same as the time limit under Article 39(1)(a) which applies where the applicant requests international preliminary examination.

In addition to easing the workload burden, the change in Article 22(1) will have immediate results in terms of simplification and streamlining of the PCT – a top priority for the United States. It will also set the stage for further simplification and streamlining, a necessary component of all PCT reform proposals currently on the table. Recognizing the benefits to U.S. IP interests, both the American Intellectual Property Law Association and the American Bar Association passed resolutions supporting the change to Article 22(1).

Trademarks

With respect to protection of marks on the Internet, the Assembly of the International Union for the Protection of Industrial Property (Paris Union) and the General Assembly of WIPO adopted a "Joint Recommendation Concerning the Protection of Marks, and Other Industrial Property Rights in Signs, on the Internet." The joint recommendations, which were drafted earlier this year by WIPO's Standing Committee on the Law of Trademarks, Industrial Designs and Geographical Indications, are significant in two respects. Not only do they represent the first international consensus position on a standard approach for determining when a mark used on the Internet has been infringed, they also provide a standard for determining what actions might indicate good faith rather than intent to infringe. In today's digital age, the adoption of the joint recommendation is an important step forward to protect the rights of IP owners on the Internet.

Copyright

Lastly, an important international consensus was also achieved at WIPO regarding the protection of audiovisual performances. Improving international protection for audiovisual performers' rights is one of the unresolved issues from the 1996 WIPO Diplomatic Conference that produced the WIPO "Internet Treaties"--the WIPO Copyright Treaty and the WIPO Performances and Phonograms Treaty. The USPTO has been working for several years with the U.S. motion picture industry, the performers' unions, and other interested parties to lay the groundwork for an agreement in this area.

Although a December 2000 WIPO Diplomatic Conference on the

Protection of Audiovisual Performances was ultimately inconclusive, the conference did reach a provisional agreement on 19 of 20 substantive articles. The main sticking point was Article 12 dealing with the question of transfer of rights between performers and producers. Ongoing work by WIPO's Standing Committee on Copyright and Related Rights and continued consultations by the U.S. government and other countries hopefully will lead to the eventual resolution of Article 12. In fact, the recent WIPO meeting confirmed that, for the very first time, a general international agreement exists on the economic and moral rights of performers in their performances in the digital environment. The U.S. government will continue to work to resolve this matter, and the issue will be placed on the agenda for the September 2002 meeting of the WIPO General Assemblies.

Winning Streak Continues for Work at Home Program

by Jennifer Chicoski and Debbie Cohn, Office of the Commissioner for Trademarks

The Trademark Work at Home Program was recognized with a second telecommuting award in 2001. The International Telework Association & Council (ITAC) presented the ITAC 2001 Government Agency Excellence in Telework honor to the United States Patent and Trademark Office (USPTO) as one of its "Stars of Teleworking of 2001." Trademark administrators, managers, and a program participant accepted the award at the National Press Club in Washington, D.C., on October 23, 2001, Telework America Day.

The Government Agency Excellence in Telework Award recognizes the government agency that most clearly and effectively demonstrates the strategic use of telework to benefit its employees, the agency, their local community and society.

This ITAC award comes on the heels of another honor, the Commuter Connections Employer Recognition Award, which recognizes employers who are leading the way in telecommuting. The Metropolitan Washington Council of Governments recognized the USPTO as this year's winner of the Telework Award. This award recognizes the company, organization or agency that has created a workplace where telecommuting produces a "smarter way to work." Recipients are evaluated on three criteria: (1) benefits to employers and employees; (2) economic and financial benefits such

as reducing commuter costs and improving the business climate; and (3) reduction of fossil fuel consumption and emissions.

The ITAC presented the results of its annual national survey on teleworking. Teleworkers were found to have greater job satisfaction, feel a greater commitment to their organization, and plan to stay with their employer. Three-quarters of survey respondents also reported a major increase in productivity and work quality.

Consistent with the ITAC survey results, USPTO found that the work at home arrangement favorably impacts productivity and morale and contributes to retention of seasoned employees. The program continues to enjoy widespread attention both inside and outside the agency, and has served as a model for the patents work at home program launched in July 2001.

Of particular concern to ITAC were the cost savings that many organizations are losing by allowing teleworkers to keep workspace for their exclusive use at the office. USPTO is piloting a hoteling program this year for 20 participants who will pilot the use of reservation software and share five offices located in a hoteling suite. Employees will come to the office a minimum of four hours per week, reserving their preferred time and day through the reservation system, which will be accessible through the USPTO's Intranet. By keeping the offices open for reservation, the agency will save space while the participants' primary offices become their home workstations. Participants will save additional commuting costs, and the community in general will benefit from fewer cars on the roads. If this pilot is successful, and hoteling arrangements are widely used for telecommuting, the USPTO could realize substantial savings in space and administrative costs.

Coming into the office only one day a week would seem to necessitate the transport of a relatively large number of application files by each of the participants in order for examiners to have sufficient work to stay busy for an entire week. But, with the advent of the Trademark Image Capture and Retrieval System (TICRS), attorneys can review electronic versions of new application files and examine them from home without physically removing the file from the office. Attorneys can compose an office action from home and deposit it in the file during their next tour of duty at the hoteling facility. Other newly added software application improvements include the RightFax desktop facsimile service and scanning and copying hardware and software from Hewlett Packard.

The engineered telecommunication system that keeps the program operating is evolving to meet the needs of participants. The tech-

nology used by the participants is being upgraded to stay abreast of the rapidly changing methods of connectivity and demands for ever-faster work speed. Current participants are being upgraded from standard phone-line modem connections to Digital Subscriber Line (DSL) and Integrated Services Digital Network (ISDN) line service. Kilobyte per second speed will be increased more than sixfold for most of the participants.

USPTO, in partnership with the National Treasury Employees Union, has been operating a work at home program for trademark attorneys since 1997. What started out as an experimental pilot for 18 attorneys has turned into a telecommuting program for 90 trademark attorneys at the USPTO. This year, the agency is further expanding its telecommuting program to include approximately 110 of its 390 current trademark attorneys. A family-friendly workplace, the USPTO hopes to greatly expand the use of alternative work site options for an increasing percentage of its employees in a greater number of positions. The current participants in the program include an equal number of men and women, both with and without dependent children. Geographic limitations are surprisingly few, as trademark examiners work from home in cities as far flung as Staunton, Virginia; Harrisburg, Pennsylvania; and Boston, Massachusetts.

Teleworking, now more than ever, has come to the forefront of the minds of many employers, including government agencies. The Office of Personnel Management (OPM) recently sponsored a forum on telecommuting attended by Rep. Frank R. Wolf (R–VA) and Rep. Constance Morella (D–MD), who along with others urged agency officials at the forum to push for a significant expansion of federal telecommuters. In support of such expansion, OPM intends to launch an Internet-based telework training program for federal managers, personnel directors and employees, sponsor a nationwide satellite broadcast aimed at thousands of employees, and publish a telework guide for managers.

Throughout the life of the program, many organizations looking to start a work at home program for their own employees have contacted the USPTO. Trademark representatives have been asked to speak at national conferences on telecommuting and at local and regional conferences and seminars.

Both the participants and the administrators of the trademark work at home program expect that the agency will stay on its path of success and continue to serve not only its own staff and employees, but also the community at large.

USPTO Still Experiencing Substantial Growth in Business Method Applications

Report of Fiscal Year 2001 Statistics

by Wynn Coggins, Technology Center 2100

The public attention to the operations of the United States Patent and Trademark Office (USPTO) in the areas that examine patent applications related to business methods continues to be strong. Application filings in business method-related arts (Class 705) continue to be substantial, and hiring and staffing levels have increased in workgroup 2160, the workgroup that handles business method-related applications, to meet examination resource needs in these areas.

Today, 82 examiners work in workgroup 2160. This is an increase of 47 examiners since the beginning of fiscal year 2000. To achieve this increase, an examiner work assignment program was initiated that brought 36 experienced examiners from other areas of the USPTO that had an interest and the necessary backgrounds in the business method area. Additionally, new hires from outside the agency also have been brought on board to examine business method-related applications.

The majority of the examiners in Class 705 have data processing and computer education or experience. Other educational and business industry work experience includes the fields of banking, securities, business development, marketing analysis, real estate analysis, business consulting, management, sales, insurance, business information systems, and financial analysis. Additionally, 30 examiners have advanced or multiple degrees, 12 have law degrees, seven have a Ph.D., and 21 have their Masters Degree (including six examiners with an MBA). Thus, the knowledge base of the examiners working in Class 705 is exceptional.

Fiscal Year 2001 Statistics

The USPTO anticipates about 10,000 application filings in Class 705 for fiscal year 2001. Approximately 7,800 application filings were received in Class 705 in fiscal year 2000.

The agency issued approximately 433 patents in Class 705 in fiscal year 2001. Approximately 899 patents issued in Class 705 in fiscal year 2000. The allowance rate was 45 percent (excluding IPERs) for workgroup 2160 in fiscal year 2001.

The average pendency to first action in Class 705 was 23.5 months. The average pendency to first action was 14.6 months for all workgroups combined.

The average time to disposal was 28.5 months in Class 705, and the average time to disposal was 25.6 months for all workgroups combined.

Both the average pendency and average time to disposal are data for the quarter ending 9-30-01 and include design patents.

Helpful Hints

for patent practitioners and applicants

Lessons from--and a Salute to--Ian A. Calvert

by Richard J. Apley, Director, Office of Independent Inventor Programs

Three recent events converged that caused me to have my worst nightmare in recent memory. The events were: a very spicy dinner; the receipt of the Eighth Edition of the Manual of Patent Examining Procedure (MPEP); and the retirement of Ian A. Calvert, Administrative Patent Judge (APJ), Board of Patent Appeals and Interferences (BPAI). Before I reveal the horrific details of my nightmare, I'll explain why the three events triggered the nightmare.

First, I cannot eat spicy food. It gives me heartburn. But like Charlie Brown trying (and never succeeding) to kick the football, I'll give it one more try and maybe the food won't bother me.

Second, the size of the Eighth Edition of the MPEP instantly made me feel that there was a conspiracy to force me to relearn everything I had learned in 35 years at the United States Patent and Trademark Office (USPTO). The "conspirators" were Magdalen Greenlief, editor of the MPEP, Linda Therkorn, assistant editor, Stephen Kunin, deputy commissioner for patent examination policy, Robert Bahr, senior patent attorney, and Robert Spar, director of

the Office of Patent Legal Administration and his staff of legal advisors. They "conspired" to produce a fantastically complete and detailed 20-pound revision that Ms. Greenlief understates as an "extensive revision necessitated by the American Inventors Protection Act of 1999 and eight other rules."

Third, the retirement of Ian Calvert means the loss of a unique USPTO resource. Ian was not "just an APJ," he was a former vice-chief APJ of the BPAI and the former chairman of the Board of Patent Interferences. There were few supervisory patent examiners that didn't have Ian's phone number memorized or on their speed-dial. If there was a question on interferences, you had to seek Ian's opinion and advice. Ian always had time for you and always had advice on handling your problem.

The nightmare: I was reviewing the Eighth Edition of the MPEP and got to Section 2300, Interference Proceedings, and saw empty spaces with the word "**REDACTED**" boldly typed across the space rather than enlightening text; and some pages were totally blank with the words "**THIS PAGE IS INTENTIONALLY LEFT BLANK**" boldly written across the page. Finally on page 2300-38 was a smiling picture of Ian Calvert sitting in a fishing boat in North Carolina holding the missing text. How are we expected to know interference proceedings without Ian's presence? He took the knowledge with him.

Luckily, Ian left behind some helpful hints for examiners and the public to navigate through the changes to Section 2300.

> **1.** The search for interfering applications must not be limited to the class and subclass in which the application is classified, but must be extended to all classes, in and out of the technology center, which it has been necessary to search in the examination of the application.
>
> **2.** The definition of "interference" permits interference between one or more applications and one or more patents provided it does not create interference between patents.
>
> **3.** 35 USC 135(b)(1) states that a claim which is the same as, or for the same or substantially the same subject matter as, **a claim of an issued patent** may not be made in any application unless such a claim is made prior to one year from the date on which the patent was granted; and (b)(2) states that a claim that interfers with **a claim of an application published under 35 USC 122(b)** may be made in an application filed after the application is published only if the claim is made before one year after the date on which the application is published. Examiners are reminded to review

any suggested claim to the applicant to ensure it is in compliance with Section 135(b).

4. Examiners are reminded to consult with their technology centers' interference practice specialist for advice in proposing interference.

There were more notes and helpful hints left behind by Ian. Most were directed to requirements for taking the North Carolina bar exam, secret fishing locations, and designs for a retirement home. We located a crumbled piece of paper in his desk that had this saying on it: Attitude is a little thing that makes a big difference. Thanks, Ian, for 37 great years and for an attitude of dedicated service and helpfulness.

Corrections and Clarifications

In the September/October 2001 issue of USPTO TODAY, the Helpful Hints column suggests that only patent attorneys, agents, or individual inventors can access PAIR (patent application information retrieval). The public also may access PAIR, though public access is restricted to the "public" information contained in PAIR such as applications published after 18 months.

Faces of the USPTO

The American Intellectual Property Law Association recognized 25 outstanding patent examiners and trademark attorneys at its annual meeting in October. Andrea Ryan, AIPLA president, presented certificates of recognition to the examiners/attorneys for their contributions to the integrity of intellectual property law while in distinguished service at the United States Patent and Trademark Office.

2001 Outstanding Patent Examiners

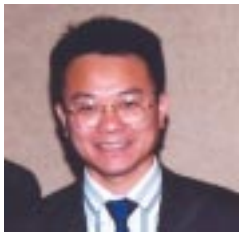
Loha Ben, *Technology Center 2800*

Joseph H. Feild, *Technology Center 2100*

William Briggs, *Technology Center 3700*

Karl Group, *Technology Center 1700*

Wing Chan, *Technology Center 2600*



Victor Kostak, *Technology Center 2600*

William Doerrler, *Technology Center 3700*

Milton Nelson, Jr., *Technology Center 3600*

Rena Dye, *Technology Center 1700*

Michael Peffley, *Technology Center 3700*

Bentsu Ro, *Technology Center 2800*

Robert P. Swiatek, *Technology Center 3600*

Allen Robinson, *Technology Center 1600*

Amir Zarabian, *Technology Center 2800*

Joel Sincavage, *Technology Center 2900*

William Powell (Technology Center 1700), Jeff Russel (Technology Center 1600), Jean Witz (Technology Center 1600), and George Wyszomierski (Technology Center 1700) were also honored.

2001 Outstanding Trademark Attorneys

Leigh C. Case, *Trademark Law Office 105*

Marc J. Leipzig, *Trademark Law Office 108*

Elissa Garber Kon*, Trademark Law Office 110*

LaVerne Thompson, *Trademark Law Office 113*

Douglas M. Lee, *Trademark Law Office 108*

Janice L. McMorrow, *Trademark Law Office 104*

Good Old Golden Rule Days Revisited in Patent and Trademark Museum

by Ruth Nyblod, Office of Public Affairs

Remember the excitement of the first day of school? Decked out from head to toe in new clothes and loaded down with the latest school supplies, the anticipation of the day ahead made our hearts pitapat. All our senses seemed heightened as we watched for the big yellow school bus to round the bend. We listened for the bell that would signal the start of a new learning experience; and the smell of a brand new box of crayons... white paste--a delicacy for some--the pulled pigtails... the pop quizzes... well, ok, some memories are better than others.

What we probably were not aware of at the time was that inventors were helping us all along the way to learn our ABCs and 123s. A new exhibit, ***School Days: Inventions and the Classroom,*** opened in the Patent and Trademark Museum in October. The exhibit honors the inventive men and women whose contributions shaped the face of education. Some patented school supplies and playground equipment, and others contributed designs for teaching aids. Text book authors registered their copyrights, and companies registered their trademarks.

In addition to the many patented inventions and registered trademarks on display, over 40 school-related patent models are featured courtesy of Alan Rothschild and the Rothschild Petersen Patent Model Museum.

Rothschild has been collecting patent models for over a decade. His collection now numbers nearly 4,000 models and other related documents that span the industrial revolution. Until 1870, a model was a required component of a patent application. Rothschild has proudly restored a portion of his collection of models and offers the public--by appointment--a glimpse at this legacy of American ingenuity at the Rothschild Petersen Patent Model Museum in Cazenovia, New York.

Come and reminisce the simpler days of scraped knees and playground rhymes, of crushes and report cards. The sites, sounds and smells will come rushing back... but don't worry, no pop quiz this time.

The Patent and Trademark Museum is located on the lobby level of Crystal Park 2, 2121 Crystal Drive, Arlington, Virginia. The museum is open Monday through Friday (except holidays) from 9:00 a.m. to 5:00 p.m. The School Days exhibit will run through the end of January.

Did you Know?

Hyman Lipman earned more than $100,000 from his 1858 invention that combined pencil and eraser. The patent was later invalidated after the courts decided a patent could not be granted simply for putting together two items that already existed separately.

Until the 1870s, most pencils were square.

The first box of eight Crayola crayons sold in 1903 for a nickel in the same trademark green and yellow packaging still used today.

Crayola crayon color names are printed in lower case because tests reveal that lower case letters are easiest for elementary school students to read.

Elmer's Glue is white because of the natural reaction of the raw materials used to make the glue. It contains no animal products.

The moral lessons of McGuffey's Readers, which sold more than 122 million copies from 1836 to 1922, shaped generations of schoolchildren.

USPTO Recognizes Patenting HIV/AIDS Inventions as Part of World AIDS Day

by Raj Bawa, M.S., Ph.D., Primary Examiner, Technology Center 1600

World AIDS Day, celebrated annually on December 1, pays tribute to those who have AIDS and those who have died of AIDS. It also serves as a catalyst to the development of empathy for people suffering from HIV/AIDS. The first acclaimed World AIDS Day was December 1, 1988. This day emerged from an international summit of health ministers who called for a spirit of social tolerance toward people living with HIV/AIDS, and urged a strengthening of information exchange and awareness regarding the AIDS pandemic. In recent years, this global day of remembrance has taken on renewed significance and activism, partly to counter the public's misguided perception that the advent of powerful anti-HIV drug combinations such as the "triple cocktail" has made AIDS a thing of the past.

Below are excerpts from a scientific paper on patenting HIV/AIDS-related inventions written by Raj Bawa, primary examiner in technology center 1600. For a copy of the entire paper, contact Dr. Bawa at 703/308-2423, or e-mail raj.bawa@uspto.gov.

THE PATENT DATABASE

HIV infection and AIDS present an enormous challenge to the world's health care systems, especially since an effective vaccine has yet to be developed. However, as a result of enormous public and political pressures in the U.S., the Food and Drug Administration (FDA) has developed an accelerated approval program for HIV/AIDS therapies. Similarly, in 1995 the United States Patent and Trademark Office (USPTO) provided for expedited prosecution of HIV/AIDS patent applications. Apart from this, the USPTO established a patent database to give the public and the scientific community access to cutting-edge research in patents, including HIV patents.

The USPTO patent database (http://www.uspto.gov/patft), which is updated weekly, is a database of the over 6.5 million U.S. patents issued since 1790. This database offers full-page images of patents issued from 1790-1975 while patents issued from 1976 to the most recent can be searched by full-text fields. The accelerated FDA approval program and the establishment of an expedited patent examination process for inventions relating to HIV/AIDS are

positive steps to encourage search for a cure. Clearly, it is patent protection for HIV/AIDS inventions that offers an incentive to pharmaceutical and biotechnology companies to invest in and attract capital for treatment strategies relating to HIV/AIDS. In fact, such investments have already yielded enormous knowledge, materials and methods to benefit those with HIV/AIDS.

A discussion appears below of selected U.S. patents obtained from the USPTO patent database. These patents fulfill one of the following criteria: (a) the patented invention has obtained final FDA approval and is being currently marketed; (b) the patented invention is presently undergoing clinical trials that appear promising; or (c) the patent covers pioneering work in the field of HIV/AIDS research.

- *The AIDS Blood Test*

  Voluntary blood donation is an important way for Americans to express compassion and devotion to their community. However, blood transfusions can be a source of HIV infection. Although the U.S. blood supply is one of the safest in the world, the CDC estimates that the average transfusion patient has a one in 75,000 chance of receiving HIV-tainted blood. In 1985, a reliable HIV screening (not diagnostic) test was patented for infected blood. Today, there are a variety of HIV blood tests patented and approved by the FDA.

- *The OraSure Saliva Test: Swabs Over Needles*

  HIV serology is among the most accurate tests in medicine. The standard serological test for HIV involves the enzyme-linked immunosorbent assay (ELISA) as a screening test and Western Blot as a confirmatory test. Blood or urine testing for HIV is not the only way to detect HIV antibodies. Theoretically, anything (drugs, viruses, hormones, alcohol) that can be found in blood also can be found in saliva (or more accurately, oral mucosal transudate).

  A noninvasive alternative method that is as accurate as the blood test is disclosed in U.S. Patent No. 5,103,836. It describes a method and device for rapid screening of HIV antibodies from the oral mucosal transudate. The lollipop-like device, marketed by Epitope, Inc. following FDA approval in 1996, is known as the OraSure collection device. OraSure does not test for HIV in the saliva because HIV is not transmitted through saliva; it detects HIV antibodies. The apparatus has a special absorbent swab on a handle that is placed between the cheek and gums for two

minutes to collect oral mucosal transudate having a high concentration of antibodies. The sample is subsequently subjected to standard immunological testing for HIV antibodies, with results obtained within two weeks. This screening method is gaining widespread use among healthcare workers due to its speed, accuracy and convenience (unlike blood samples, OraSure samples need not be refrigerated).

Epitope, Inc. has developed a further improvement on the saliva assay method and device (U.S. Patent No. 5,714,341). This method is able to detect both HIV 1 and HIV 2.

■ ***Evil Drug's Good Side***

The notorious drug thalidomide, a teratogen responsible for severe deformities in babies born in the late 1950s and early 1960s, appears to be making a comeback. This banned drug was taken by pregnant women, mostly in Western Europe and Canada, as a sedative to stem morning sickness with disastrous consequences (the drug was never approved by the FDA for use in the US).

However, according to U.S. Patent No. 5,385,901, thalidomide can be used to treat HIV infection as well as alleviate some of its symptoms. Celegene Corporation, which has been assigned the patent rights, manufactures this drug under the trade name Thalomide. The immune protein Tumor Necrosis Factor (TNF) is one of the most potent physiological activators of AIDS. In fact, TNF is elevated in AIDS patients, tuberculosis and certain cancers. It is responsible for the characteristic fever, anorexia and weight loss (or "wasting syndrome") associated with these diseases. According to this patent, thalidomide slows/blocks the synthesis of alpha TNF to normal levels; levels that actually help the body combat infections and certain cancer cells. In fact, a study last year reported that selectively suppressing alpha TNF and interleukin-1 could slow the progression of HIV infection.

The FDA approved thalidomide in 1998 to treat a complication of leprosy known as erythema nodosum leprosum. This drug is relatively safe and nontoxic to humans, except, obviously, for pregnant women. A recent double blind, placebo-controlled study provided more evidence that a short course of low-dose thalidomide leads to weight gain in men with AIDS-associated cachexia or wasting

(oxandrolone is also effective in this regard; see U.S. Patent No. 5,872,147). Recently, the drug was effective against some cancers in small clinical trials, including AIDS-related Kaposi's sarcoma and multiple myeloma. The precise mechanism of action of thalidomide remains a mystery, though suppression of new blood vessel growth (angiogenesis) appears to be involved.

A large number of analogs and derivatives of thalidomide are in the development pipeline, some of which lack the drug's teratogenicity and are not sedating. It also is the focus of at least 150 clinical trials for various conditions/diseases. However, it remains to be seen if this once-feared "taboo drug" will acquire "wonder drug" status as a treatment for AIDS.

With incentives provided by the patent system, scientists and inventors worldwide are working hard to get the proper therapies and preventive strategies to those in need. We all look toward the day when we will triumph over the tragedy of HIV/AIDS.

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